



## Standard Operating Procedure Refuse Disposal Division



### Groundwater Monitoring Sample Collection

#### ***Samples for organics analysis:***

1. Do not filter samples requiring analysis for organics.
2. Keep samples in their original container. Do not transfer samples from one container to another due to a potential loss of organic material onto the walls of the container or aeration.
3. Handle and analyze total organic halogens (TOX) and total organic carbon (TOC) samples as materials containing volatile organics.
4. DO NOT allow headspace to exist in the sample containers to minimize the possibility of volatilization of organics.
5. Note the headspace in the sample containers in the field logs and laboratory analysis at the time of receipt by the laboratory, as well as at the time the sample was first transferred to the sample container at the wellhead.

#### ***Samples for metals analysis:***

1. If sampling for *dissolved* metal analysis, use containers with NO preservatives.
2. If sampling for *total* metals, use preserved containers.
3. If required, filter one portion through a 0.45-micron membrane filter, transfer to a bottle, preserve with nitric acid to a pH less than 2 and analyze for dissolved metals.

**\*Note** – Any difference between the total and dissolved fractions may be attributed to the original metallic ion content of the particles and any sorption of ions to the particles.

***Environmental Management System (EMS) –ISO 14001***

***PROCESS MAP #: GW - 1.0***

#### **Benefit of Compliance to Instruction:**

- Safely acquire representative samples
- Ensures consistency in all readings
- Compliance with RWQCB standards for sampling protocol

#### **Consequence of Non-Compliance to Procedure:**

- Non-representative samples
- Fines and/or violations from RWQCB
- Disciplinary action

**Reviewed by:** Mark zu Hone, *EMR*

**Approved by:** Ray Purtee, *Senior Mechanical Engineer*

Date: July 2, 2001

*The on-line version and secured hardcopy are the controlled documents. The secured hardcopy will be identified by a "Controlled Copy" stamp (in red) and RDD Deputy Director signature. Any other documents are uncontrolled. Verify revision level status on-line or contact the EMR.*